

4 depositing a cladding material into the hole;
5 depositing an optical core material into the hole.

1 16. (New) The method of claim 1, wherein making the hole in the substrate is
2 achieved by etching.

1 17. (New) The method of claim 16, further comprising:
2 forming a lens on top of the optical core material.

1 18. (New) The method of claim 17, further comprising:
2 depositing a polymer on top of the optical core material; and
3 curing the polymer to form the lens.

1 19. (New) The method of claim 18, further comprising:
2 polishing the substrate before forming the lens.

1 20. (New) The method of claim 16, wherein the depositing the cladding material
2 into the hole is achieved by depositing an oxide into the hole.

1 21. (New) The method of claim 20, wherein the depositing the optical core material
2 in the hole is achieved by depositing a first polymer in the hole.

1 22. (New) The method of claim 21 further comprising:

2 depositing a second polymer over the first polymer; and
3 curing the second polymer to form a lens on top of the optical core material.

1 23. (New) A substrate comprising:
2 a hole extending from a first side of the substrate to a second side of the
3 substrate;
4 a deposition layer of cladding on an inner surface of the hole; and
5 a deposition layer of optical core material encased by the deposition layer of
6 cladding.

1 24. (New) The substrate of claim 23, wherein the optical core material is a polymer.

1 25. (New) The substrate of claim 24 further comprising:
2 a polymer lens formed on one end of the deposition layer of cladding and the
3 deposition layer of optical core material.

REMARKS

In the Office Action mailed March 15, 2002, claims 1-15 were rejected. Claim 1, 5, 6, 7, and 12 were found to be unpatentable under 35 USC 102(b) as being anticipated by Nakamura et al., U.S. Patent No. 5,604,835 (hereinafter "Nakamura"). Claims 2, 4, 8, 13 and 14 were rejected under 35 USC 103(a) as being considered unpatentable over Nakamura in view of Kenney et al., U.S. Patent No. 6,311,004 (hereinafter "Kenney"). Claims 3, 9-11, and 15 were rejected under 35 USC 103 (a) as